

**FEATURES**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

**MECHANICAL DATA**

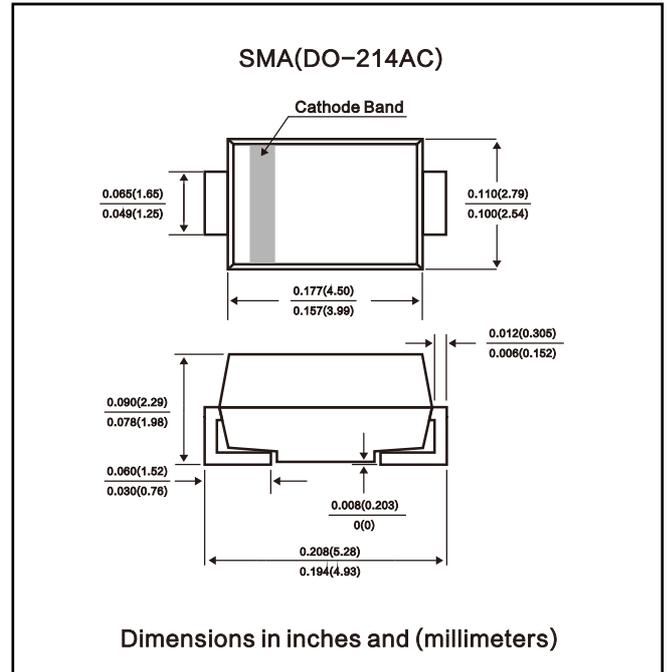
**Case:** JEDEC SMA molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.012 ounce, 0.3 gram


**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

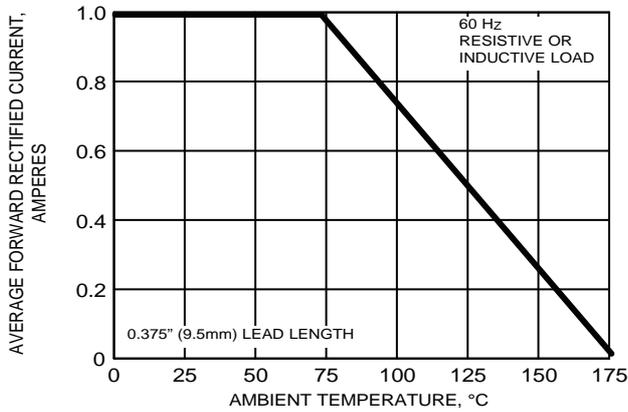
- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	M1	M2	M3	M4	M5	M6	M7	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375 (9.5mm) lead length at $T_A=25$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30							Amps
Maximum Instantaneous Forward Voltage @ 1.0A	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	$T_A=25$	$I_R$							" A
	$T_A=100$								
Maximum Full Load Reverse Current, full cycle average 0.375 (9.5mm) lead length at $T_L=75$	$I_{R(AV)}$	30							" A
Typical Junction Capacitance (Note 1)	$C_J$	13							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50							/W
Operating Junction Temperature Range	$T_J$	-55 to +150							
Storage Temperature Range	$T_{STG}$	-55 to +150							

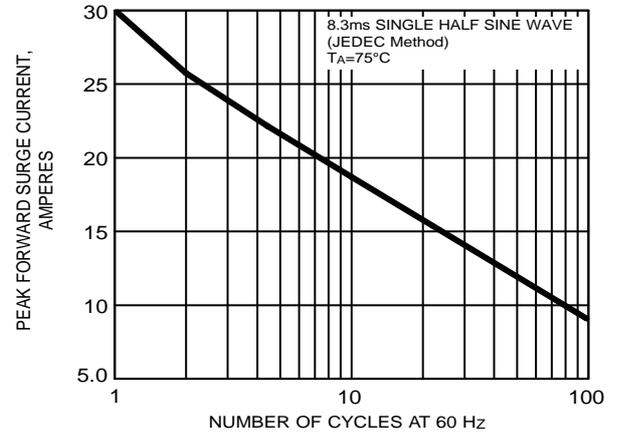
**Notes:**

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to terminal 6.0mm<sup>2</sup> copper pads to each terminal.
3. The chip size is 40mil x 40mil

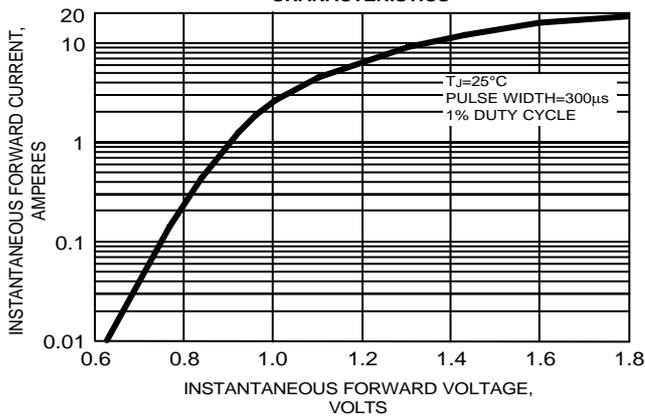
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



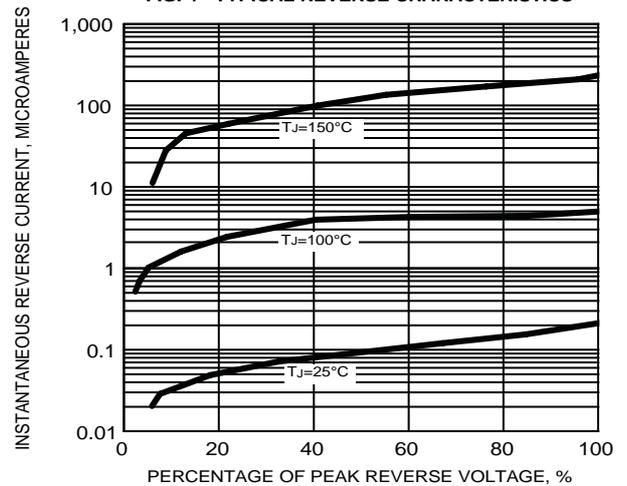
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



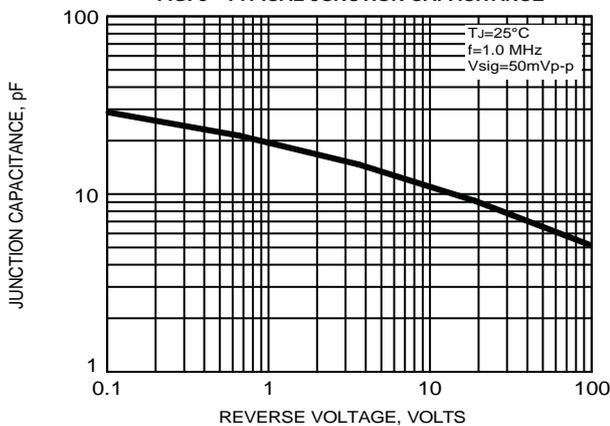
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

